

### **REMARKS**

In response to the non-final Office Action mailed September 16, 2005, the Attorney for the Assignee submits the appended amendments and remarks. After entry of the amendments and remarks, claims 1-27 are pending in the present application. The Examiner rejected Claims 1-4, 7-15, 17-22 and 24-27 under 35 U.S.C. § 103(a) as being unpatentable over *Shindo et al.* (U.S. Patent No. 6,210,458) in view of *Hammes* (U.S. Patent No. 6,001,145). The Examiner also rejected Claims 5, 6, 16 and 23 under 35 U.S.C. § 103(a) as being unpatentable over *Shindo et al.* in view of *Hammes*, as applied, and further in view of *Marchart et al.* (U.S. Patent No. 6,881,238). The present amendment and response traverses all of the rejections, and allowance of the pending claims is kindly requested.

These and other arguments are presented in the remarks below.

#### **I. REJECTION OF CLAIMS 1-4, 7-15, 17-22 AND 24-27 UNDER 35 U.S.C. § 103**

The Examiner rejected Claims 1-4, 7-15, 17-22 and 24-27 under 35 U.S.C. § 103(a) as unpatentable over *Shindo et al.* (U.S. Patent No. 6,210,458) (hereinafter "*Shindo*") in view of *Hammes* (U.S. Patent No. 6,001,145) (hereinafter "*Hammes*"). Claims 1, 12, and 22 have been amended. Neither *Shindo* nor *Hammes* teach or suggest all of the elements of amended Claims 1-4, 7-15, 17-22 and 24-27.

##### ***A. Shindo fails to teach or suggest all elements of the amended claims***

*Shindo* relates to a cylindrical gas filter (26) enclosed inside of a two-piece gas filter housing (21<sub>1</sub>, 21<sub>2</sub>). As a horizontal flow of gas encounters the filter (26), the gas forces the ring-like support member (28) against an internal surface of one part of the gas filter housing (21<sub>2</sub>). The ring-like support member (28) is merely sandwiched between a first half of the gas filter housing (21<sub>1</sub>) and second half of the gas filter housing (21<sub>2</sub>) with metal O-rings (31, 32) respectively positioned between the surface of the ring-like support member (28) and the surfaces of the gas filter housing (21<sub>1</sub>, 21<sub>2</sub>). In this orientation, the ring-like support member (28) is shown positioned in a substantially vertical orientation. *Shindo* does not disclose or suggest use of a filter with a notch or any other contact surface for mounting adjacent to the load bearing surface, wherein the adjacent surfaces include a

contact angle that is substantially coplanar with a center of gravity of the housing. In particular, *Shindo* fails to disclose or suggest a notch associated with a leading portion of the air circulation component, housing, or filter as set forth in amended Claims 1, 12 and 22.

Furthermore, the orientation in *Shindo* of the ring-like support member (28) with respect to the housing (21) does not utilize the weight of the filter (26) to increase any sealing pressure at the trailing portion of the filter (26). Thus, *Shindo* fails to disclose or suggest use of a filter with a notch or any other contact surface, wherein a portion of the weight of the housing transfers between the surfaces and causes a sealing pressure against a portion of the air circulation system. In particular, *Shindo* does not disclose or suggest the amended element of Claim 12, “wherein a portion of the weight of the housing transfers between the surfaces, and causes a sealing pressure adjacent to a trailing portion of the housing and against a portion of the air circulation system.” Claims 1 and 22 include similar elements, which are neither taught nor suggested by *Shindo*.

***B. Hammes fails to teach or suggest all elements of the amended claims***

*Hammes* relates to a series of vertically stacked filtration modules (5, 7, 9, 11, 13). *Hammes* includes a pair of pivoting levers (18, 19), which can pivot from a lower portion of a base (2) and can clamp to opposing sides of the vertical stack of filtration modules (5, 7, 9, 11, 13). Each pivoting lever (18, 19) includes an inwardly directed pivoted arm (25, 26) with an extension (50). The inwardly directed pivoted arms (25, 26) and extension (50) can engage a groove (49) disposed in the interspace between upper module (9) and intermediate module (7). When the pivoting levers (18, 19) are rotated away from the vertical stack of filtration components (5, 7, 9, 11, 13), the movement of the extension (50) causes the upper and intermediate modules (7, 9) to be lifted above the lower module (5) thereby facilitating removal of lower module (5) from the vertical stack. Due to the vertical orientation of the filtration modules (5, 7, 9, 11, 13) during operation of the components, neither the weight of the upper or the intermediate modules (7, 9) themselves or the contact between the extension (50) and the groove (49) creates any sealing pressure adjacent to the trailing portion of the upper module (9). Instead, the sealing pressure on the trailing edge of the upper module (9) may be caused by the weight of modules (11, 12,

13, 14) stacked above and in close proximity to the upper module (9). Thus, *Hammes* fails to disclose or suggest use of a filter with a notch or any other contact surface, wherein a portion of the weight of the housing transfers between the surfaces and causes a sealing pressure adjacent to a trailing portion of the housing and against a portion of the air circulation system. In particular, *Hammes* fails to disclose or suggest the amended element of Claim 12, “wherein a portion of the weight of the housing transfers between the surfaces, and causes a sealing pressure adjacent to a trailing portion of the housing and against a portion of the air circulation system.” Claims 1 and 22 include similar elements, which are neither taught nor suggested by *Hammes*.

**C. *Shindo and Hammes cannot be combined in the manner described***

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). As discussed above, *Shindo* relates to a horizontally oriented filter and housing, wherein the filter is sandwiched between two portions of the housing. In contrast, *Hammes* relates to a vertically oriented stack of filtration modules, wherein a pair of pivoting levers clamps the stack of modules in close proximity to each other. One skilled in the art would lack the motivation or suggestion within the references themselves to combine the extension and groove combination described by *Hammes* with the *Shindo* filter since there would be no need to utilize the vertical lifting functionality of the extension and groove combination of *Hammes* with the horizontally arranged filter and housing components of *Shindo*. In contrast, applicants’ claimed apparatus uses a notch and groove combination to improve the sealing capability between a filter and a housing. Neither *Hammes* nor *Shindo* provide any motivation or suggestion that the extension and groove combination can improve the sealing capability between a filter and a housing. Thus, the obviousness rejection cannot stand due to the lack of suitable motivation or suggestion in the cited references.

**II. CLAIMS 5, 6, 16 AND 23 UNDER 35 U.S.C. § 103**

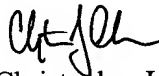
The Examiner rejected Claims 5, 6, 16 and 23 under 35 U.S.C. § 103(a) as being unpatentable over *Shindo et al.* in view of *Hammes*, as applied above, and further in view of *Marchart et al.* (U.S. Patent No. 6,881,238).

Claims 5, 6, 16, and 23 are ultimately dependent from at least one of the amended independent Claims 1, 12, and 22. Because arguments of patentability have been advanced for the underlying base claims, Claims 5, 6, 16, and 23 should be allowable over the cited references.

**CONCLUSION**

Claims 1-27 are pending in the application. The Office Action rejections have been traversed by the present response. Claims 1-27 are now in condition for allowance. The Examiner is invited and encouraged to contact the undersigned attorney of record at (404) 815-6048 if such contact will facilitate a Notice of Allowance. If any additional fees are due, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 11-0855.

Respectfully submitted,



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